Atmospheric conditions during solar radiation measurements, Blue Hill Observatory of Harvard University

Date and time from apparent noon	Air temperature	Wind (Beaufort Scale)	Visibility (scale 0–10)	Sky blueness	Cloudiness and remarks
February 1935	°C.				
1; 2:21 a. m.	−14.1	W 2	8	6	2 Ci.
1; 1:27 p. m.	−6.1	WSW 3	9	7	1 Ci.
1; 2:38 p. m.	−4.4	SWxS 3	8–9	11	Few Ci, Cist, light haze.
1; 4:01 p. m.	−4.7	SW 4	8	6	1 Ci, few Cu.
6; 2:46 a.m.	−17.2	N 5	7–9	9	Few Frcu, heavy haze; inversion.
6; 1:24 p. m.	−8.9	NNW 2	6–7	9	Few Frcu, heavy smoke.
6; 2:58 p. m.	−7.8	NNW 3	6–7	10	No clouds, heavy smoke.
7; 2:48 a. m.	−9.9	NWxW 3	8–9	12	Few Cist; inversion.
7; 1:02 a. m.	−6.7	NNW 2	8–9	8	Few Cist; inversion.
7; 0:03 a. m.	−5.6	NNW 2	8–9	8	Few Cist; inversion.
7; 1:47 p. m.	−3.2	SW 3	8	12	No clouds, light haze.
7; 3:55 p. m.	−1.7	SW 3	8	10	Few Ci.
11; 0:13 a. m.	±0.0	WNW 5	8–9	7	5 Cu.
12; 2:59 a. m.	−15.6	NNW 3	8–9	10	1 Ci, Cicu.
13; 3:10 a. m.	−5.6	N 4	6	9	3 Stcu, heavy haze over sun.
13; 0:00 m.	−2.8	NE 3	7	7	1 Acu, 1 Cu. haze.
13; 1:41 p. m.	−2.2	NE 3	7	9	Fumulus, few Cu, heavy haze.
15; 1:12 a.m.	−2.8	WxS 3	8	10	1 Cist, few Cunb, moderate haze.
18; 2:41 a.m.	−6.7	WSW 4	7–8	11	1 Ci, Cist, 2 Acu.
18; 3:31 p. m.	+0.3	SSW 5	8	4	Few Acu, haze.
20; 2:56 a. m.	−2.8	SSW 5	7	9	Few Stcu, Cu, moderate water haze.
20; 1:31 a. m.	−1.1	WxS 5	7–8	9	1 Ci, Acu, moderate water haze.
21; 3:22 a.m.	−8.9	W 4	8–9	8	Few Ci, Cist.
21; 2:04 a. m.	−8.1	WNW 4	8–9	10	1 Ci, Cist.
21; 0:05 a. m.	−6.1	WNW 4	9	10	4 Cicu, 1 Cu, few Acu, no haze.
21; 1:01 p. m.	−4.2	SW 4	8–9	11	1 Ci, 4 Cu, Stcu.
24; 2:29 a. m.	−3.9	W 4	7	10	Few Ci, Cist, moderate haze.
27; 1:41 p. m.	−7.8	WNW 5	8	11	1 Cist, few Acu, few Cu, light haze.
27; 4:24 p. m.	−5.6	NW 5	9	11	4 Stcu 5° from sun, light haze.
28; 3:17 p. m.	−3.8	WSW 5	7	8	2 Frcu, Cu, heavy water haze.

POSITIONS AND AREAS OF SUN SPOTS

[Communicated by Capt. J. F. Hellweg, U. S. Navy, Superintendent U. S. Naval Observatory. Data furnished by the U. S. Naval Observatory in cooperation with Harvard and Mount Wilson Observatories. The difference in longitude is measured from the central meridian, positive west. The north latitude is positive. Areas are corrected for foreshortening and are expressed in millionths of the sun's visible hemisphere. The total area for each day includes spots and groups]

Date	Eastern standard time	Heliographic: Diff. in longitude	Heliographic: Longitude	Heliographic: Latitude	Area: Spot	Area: Group	Total area for each day	Observatory
1935	*h* *m*	°	°	°				
Feb. 1	10 59	+51.0	154.5	+30.5	93		93	U. S. Naval.
Feb. 2	11 18	+65.0	155.2	+30.0	93		93	Do.
Feb. 4	12 7	−78.0	345.4	+23.0	31		31	Do.
Feb. 5	— —		No spots					Harvard.
Feb. 6	13 26	−49.5	346.9	+22.5	77			U. S. Naval.
		+29.0	65.4	−16.5		370	447	
Feb. 7	11 4	−37.5	347.0	+22.5	62			Do.
		+42.5	67.0	−17.0		586	648	
Feb. 8	13 48	−23.0	346.8	+22.5	39			Do.
		+56.5	66.3	−17.5		556	595	
Feb. 9	11 10	−12.0	346.0	+22.0	12			Mt. Wilson.
		+66.0	64.0	−18.0		831	843	
Feb. 10	11 0	0.0	345.0	+22.0	8			Do.
		+74.0	59.0	−18.0		506	514	
Feb. 11	14 15	+16.5	346.6	+22.5	31		31	U. S. Naval.
Feb. 12	13 17	−79.0	238.4	+3.0	31			Do.
		+29.5	346.9	+22.5	23		54	
Feb. 13	13 58	−68.0	235.9	+3.0		123		Do.
		−23.5	280.4	+28.0		15	138	
Feb. 14	10 43	−54.5	238.0	+2.0		128	128	Harvard.
Feb. 15	10 45	−43.0	236.3	+1.5		51		Do.
		−50.0	229.3	0.0		19	70	
Feb. 16	10 26	−29.5	236.8	+2.0		15		U. S. Naval.
		+12.0	278.3	+28.5		62	77	
Feb. 17	12 3	+27.0	279.3	+29.0		31	31	Do.
Feb. 18	11 9	+41.0	280.6	+27.0	15		15	Do.
Feb. 19	11 4		No spots					Do.
Feb. 20	13 11	−62.5	149.6	+30.0	39			Do.
		+16.5	228.6	−26.5		62		
		+65.0	277.1	−14.0		62	163	
Feb. 21	11 18	−50.0	150.0	+30.5	46		46	Do.
Feb. 24	12 10	−0.5	159.5	−22.0		108	108	Do.
Feb. 25	11 12	−75.0	72.4	−18.5	123			Do.
		+14.0	161.4	−22.0		46	169	
Feb. 26	11 5	−61.0	73.3	−17.0	221			Mt. Wilson.
		+27.0	161.3	−23.0	8		229	
Feb. 27	11 5	−48.0	73.1	−18.5	185		185	U. S. Naval.
Feb. 28	11 1	−34.5	73.5	−18.5	154		154	Do.
Mean daily area for 25 days							194.	

PROVISIONAL SUN-SPOT RELATIVE NUMBERS FOR FEBRUARY 1935

(Dependent alone on observations at Zurich and its station at Arosa)

[Data furnished through the courtesy of Prof. W. Brunner, Eidgen. Sternwarte, Zurich, Switzerland]

February 1935	Relative numbers	February 1935	Relative numbers	February 1935	Relative numbers
1		11	21	21	21
2		12	*Wcd* 26	22	7?
3		13	18	23	*Mc*17
4	*Mc*	14		24	*a* 17
5	*a*	15	*Mc* 22	25	*d*
6	29	16	20	26	18?
7	46	17	10	27	20
8	29	18	7	28	20
9	23	19	*Mc* 19		
10	28?	20	28		

Mean: 21 days=21.2.

a=Passage of an average-sized group through the central meridian.
c=New formation of a center of activity: E, on the eastern part of the sun's disk; W, on the western part; M, in the central circle zone.
d=Entrance of a large or average-sized center of activity on the east limb.

AEROLOGICAL OBSERVATIONS

[Aerological Division, D. M. LITTLE, in Charge]

By L. T. SAMUELS

Free-air temperatures during February averaged mostly above normal except over Pensacola, Norfolk, and Pearl Harbor (see table 1). The largest departures occurred in the lower levels over Pensacola. Relative humidity departures were mostly positive except over Pensacola and Seattle; the largest departures occurred over Pensacola. Temperature and relative humidity departures are included only for those stations where the length of record is sufficient to obtain a fairly satisfactory normal.

The monthly free-air temperatures averaged lowest over the northeastern part of the country and highest over the Gulf coast. The free-air relative humidities averaged highest over the extreme Northwest, the Ohio Valley, and New England. The region of lowest relative humidity was the Gulf coast.

The free-air resultant winds deviated most from the normal directions over the extreme Northwest, where marked southerly components occurred as compared to the normal westerly. Elsewhere the directions were close to normal (see table 2). Free-air resultant wind velocities were mostly above normal over the southeastern part of the country and generally below normal elsewhere. In most cases the departures from normal were of only moderate magnitude.